SONY

3-750-920-21 (2)

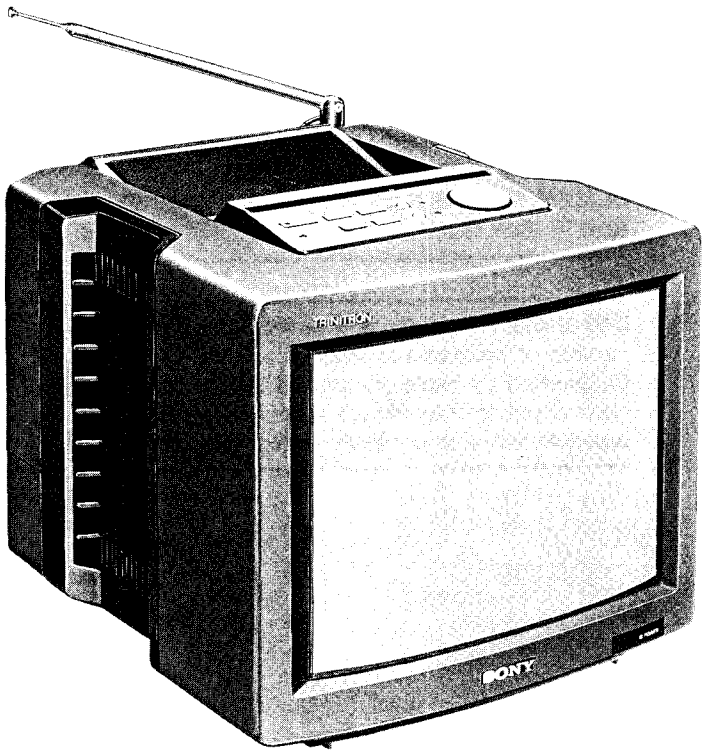
TRINITRON® COLOR TV

KV-10FMR20

Operating Instructions

Before operating the unit, please read this manual thoroughly and retain it for future reference.

B



MEGA BASS

©1989 by Sony Corporation

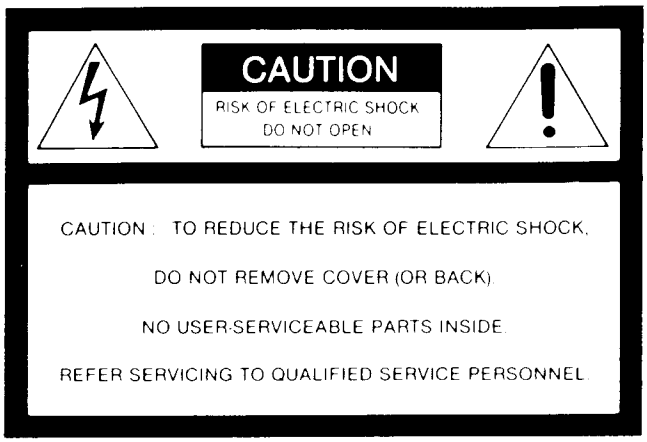
Owner's Record

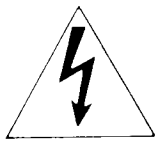
The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. KV-10FMR20 Serial No. _____

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.


CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Use of this television receiver for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

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Precautions

Safety

- Operate the unit only on 120 V AC.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not going to be used for several days or more. To disconnect the cord, pull it out by the plug.
  Never pull the cord itself.

Installation

- To prevent internal heat build-up, do not block the ventilation openings.
- Do not install the unit in a hot or humid place or in a place subject to excessive dust or mechanical vibration.

Cleaning

Clean the unit with a slightly damp soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.

Repacking

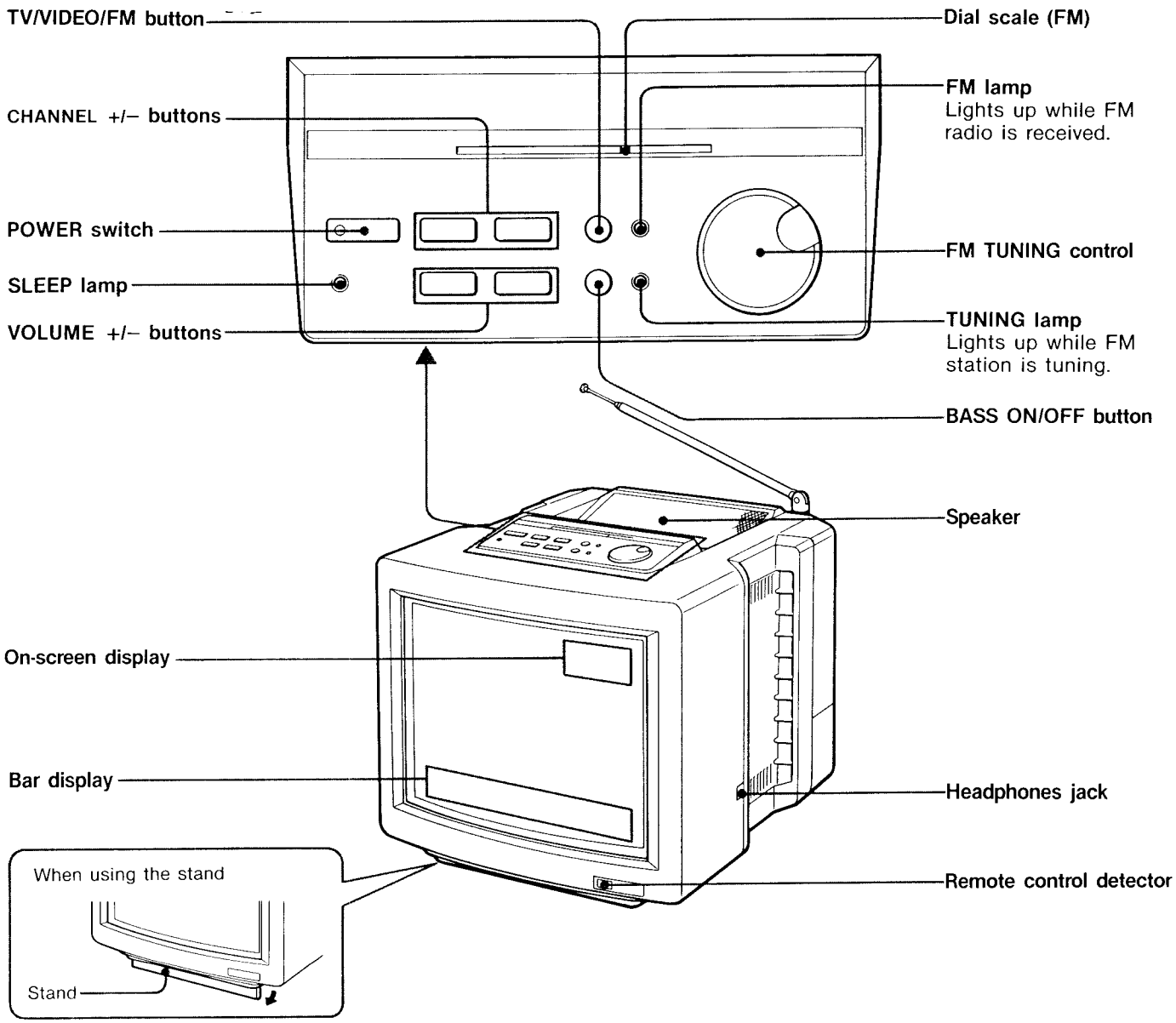
Retain the original carton and packing materials for safe transport of this unit in the future.

Features

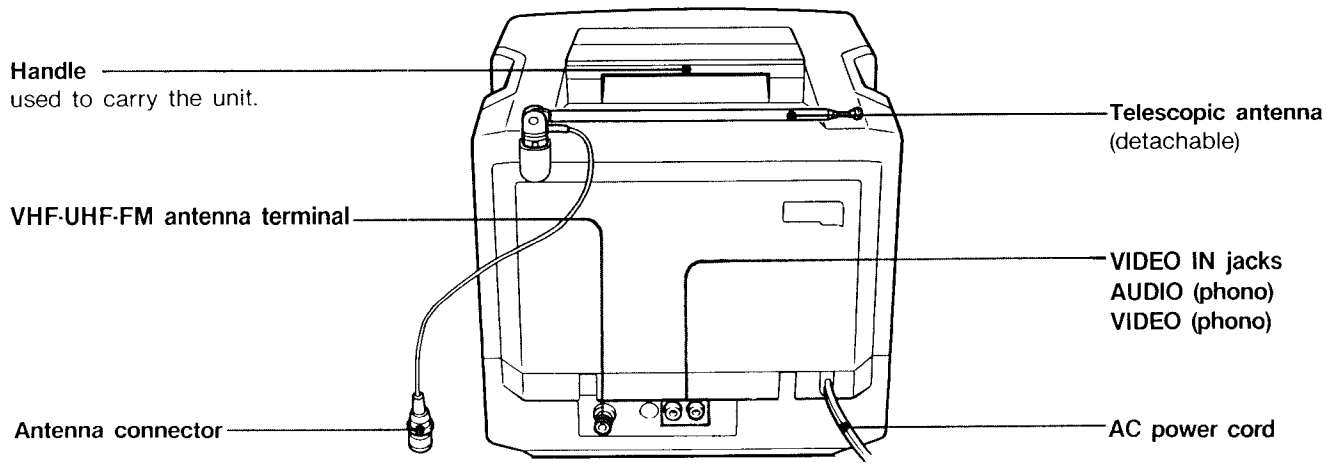
- Built-in 3-inch dia. monaural speaker with MEGA BASS sound system and good sound suitable for kitchen, bedroom and den use.
- 10-inch remote-controlled Trinitron TV.
- FM reception with a built-in radio
- On-screen display of channel numbers, volume indication and picture adjustments
- Sleep timer, which automatically turns the unit off after one hour.
- Built-in video and audio inputs for better quality picture of connected VCR, etc.
- Easy and precise channel selection with automatic tuning system.

Location of Controls

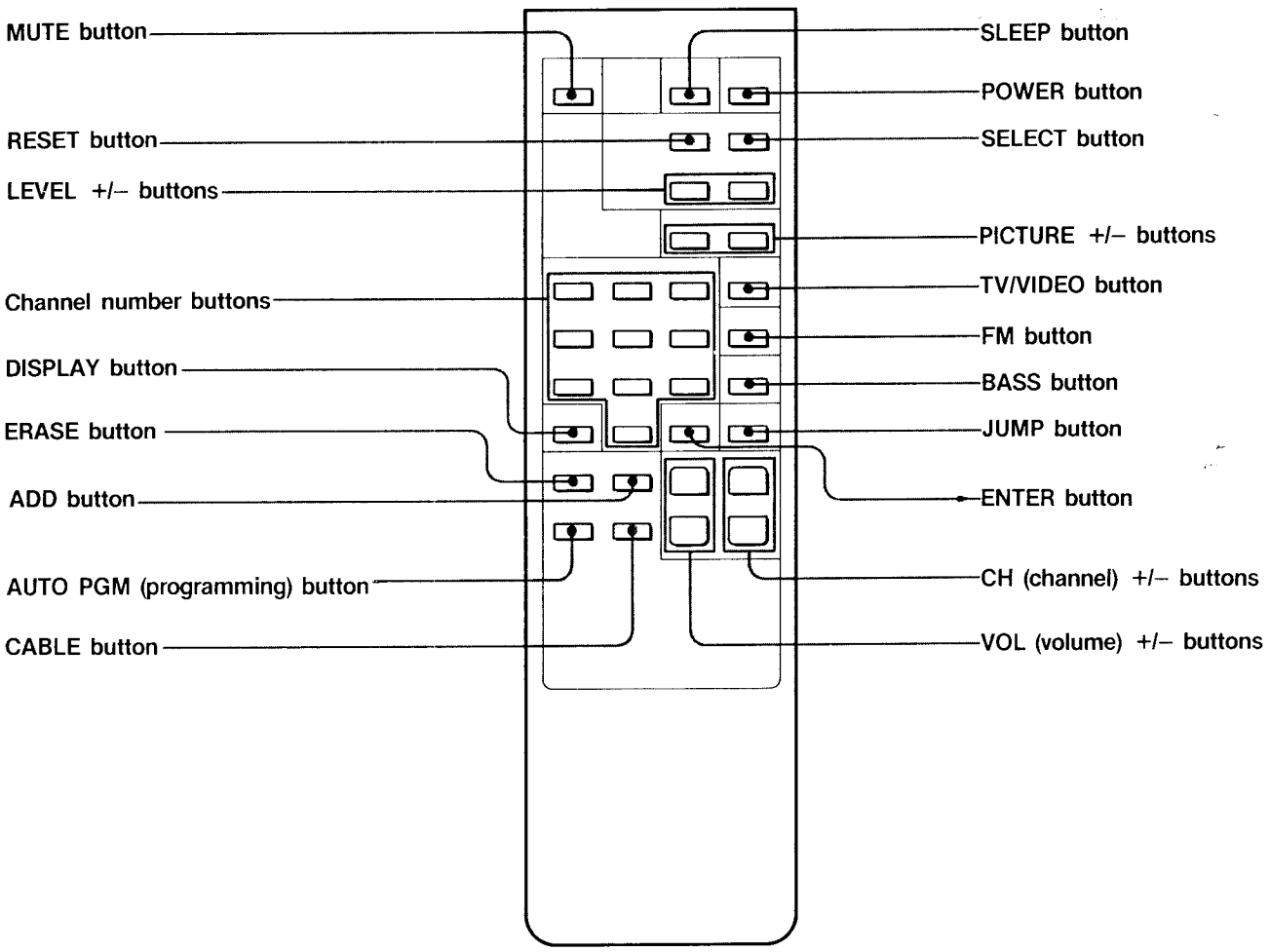
Front



Rear

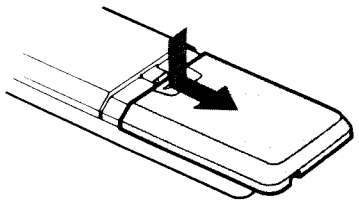


Remote Commander RM-768

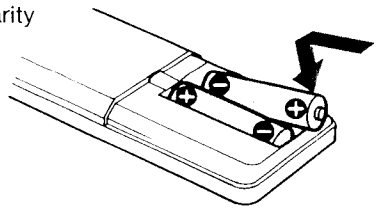


How to insert the batteries

1 Open the lid.



2 Insert two size AA (R6) batteries with correct polarity



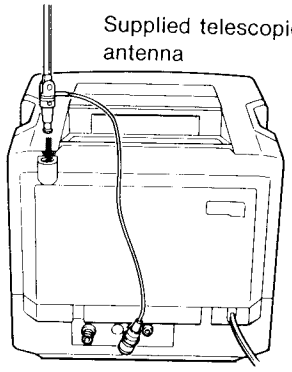
Notes

- In normal operation, batteries will last up to half a year. If the unit does not operate properly, the batteries might be exhausted. Replace all with new ones.
- To avold damage from possible battery leakage, remove the batteries for extended unused periods.
- Be sure that there are no obstructions between the Commander and the TV.
- Operable range is limited.

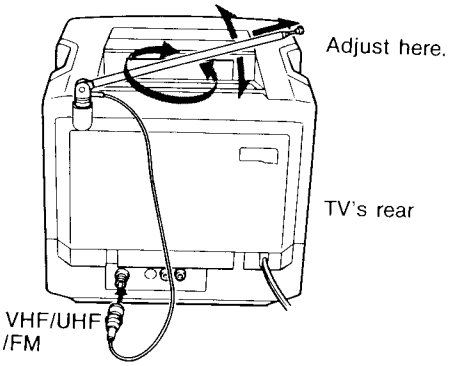
When Connecting the Supplied Telescopic Antenna

For VHF/UHF/FM reception, use the supplied telescopic monopole antenna.

1 Insert the projection into the antenna reception on the unit.



2 Plug the antenna connector into the VHF/UHF antenna terminal.



When Connecting an External Antenna

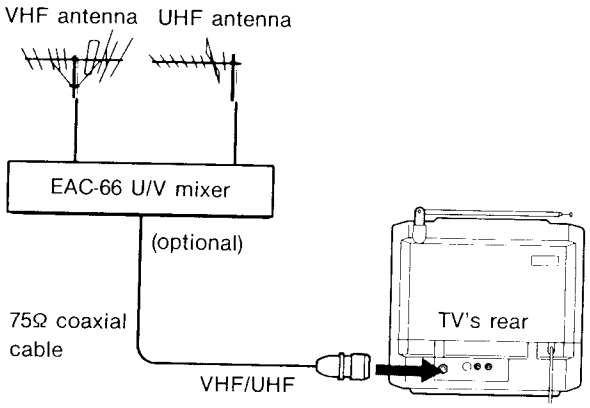
If you cannot obtain satisfactory reception with the supplied telescopic antenna, use an external antenna.

1 Remove the telescopic antenna from the antenna terminal of the TV.

2 Prepare the antenna end using the appropriate connector, and connect the antenna to the antenna terminal of the TV.

Note

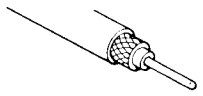
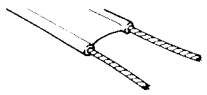
When the cable is connected to the TV with the U/V mixer, snow and noise may appear in the pictures of the cable TV channels over 37 (W + 1).

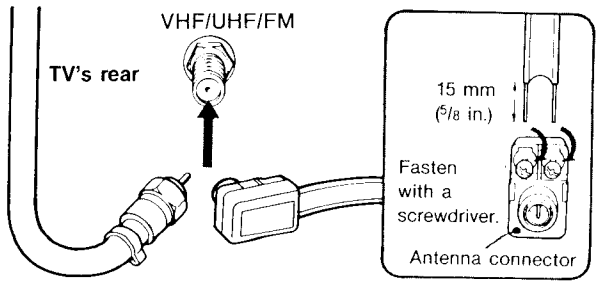


Combination VHF/UHF antenna, VHF antenna, UHF antenna or CATV cable

Cable TV reception is only possible by connecting a cable supplied by your local cable operator.
Prepare the cable end using the appropriate connector, and connect the cable to the antenna terminal of the TV.

Select the proper connector according to cable type.

When the cable is a 75-ohm coaxial type (round)	When the cable is a 300-ohm ribbon type lead-in (flat)
	
Use an optional F-type connector.	Attach the optional antenna connector.



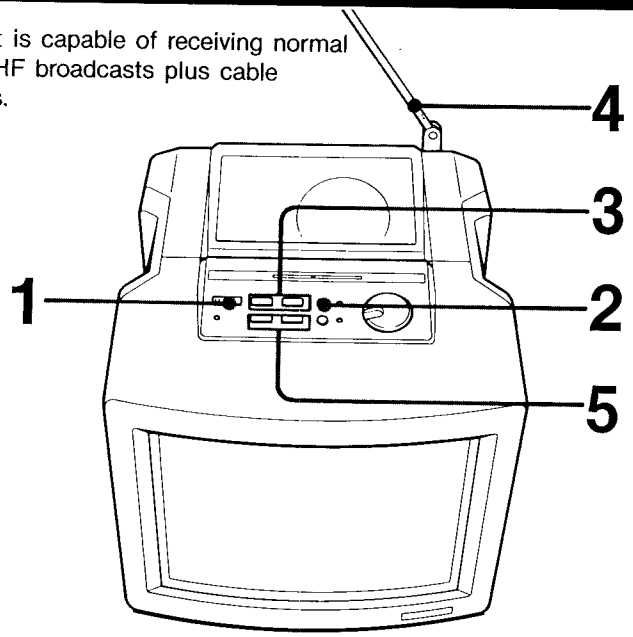
Note to CATV system installer in the U.S.A:

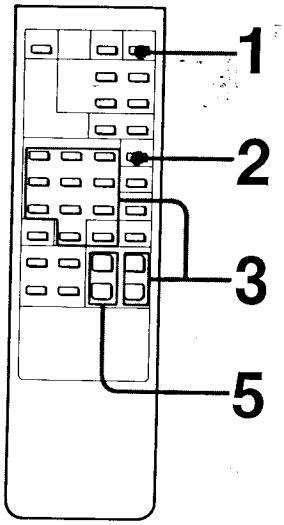
This reminder ia provided to call the CATV system installer's attention to Article 820-22 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Operation

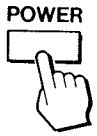
Watching TV Programs

This TV unit is capable of receiving normal VHF and UHF broadcasts plus cable TV channels.





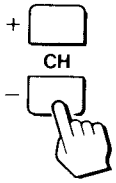
1 Press POWER.



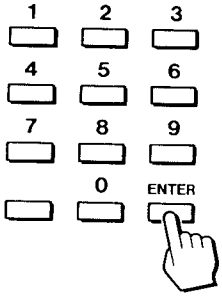
2 Press the TV/VIDEO button on the Remote Commander or the TV/VIDEO/FM button on the TV so that TV mode appears.

3 Select a channel in one of the following two ways.

To scan the preset channels in numerical sequence,
Press CH +/–.



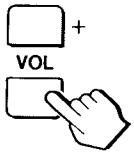
To select a channel directly,
Press the channel number button(s) and then ENTER. For example, to select channel example, to select channel 10, press 1, 0 and ENTER.

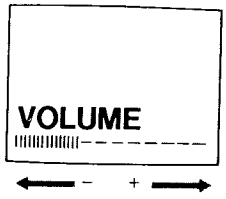


4 Adjust the antenna.
Adjust the length, direction and angle until the picture is clearest.

5 Press VOL + or – to adjust the volume.

For higher volume, press "+".
For lower volume, press "–".





To turn off the unit
Press POWER on the TV or on the Remote Commander.

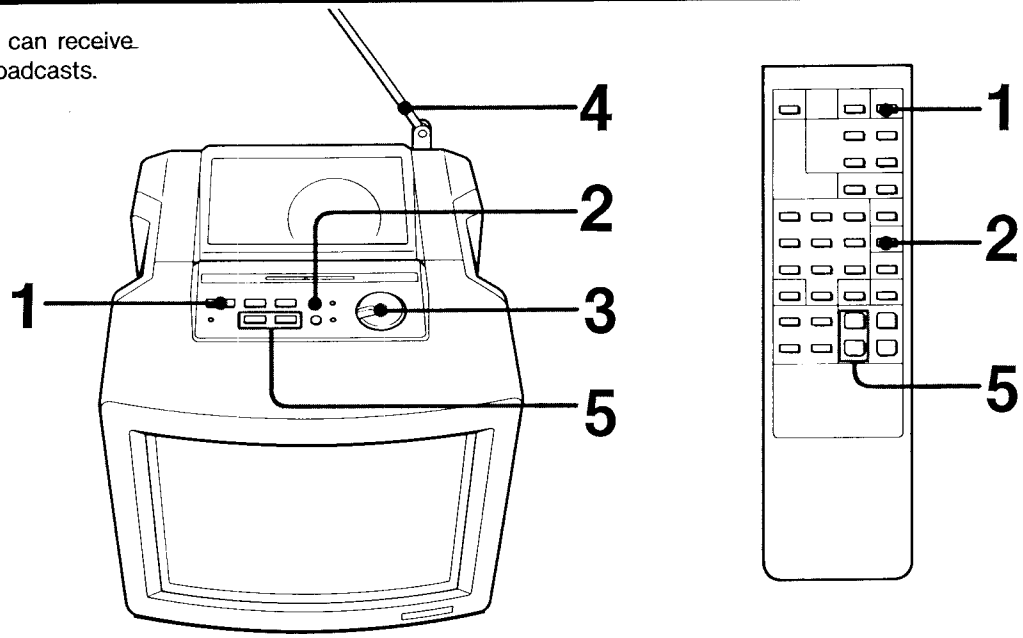
To scan the preset channels in numerical seqence
Press CH +/– buttons.

To watch cable TV channel
Press CABLE button and select a channel directly. When watching VHF/UHF channel, press CABLE button again so that "C" indicator on the screen disappears.

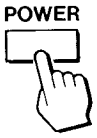
To keep the channel displayed on the screen
Press DISPLAY. To make the channel display disappear, press DISPLAY again.

Listening to the Radio

This TV unit can receive FM radio broadcasts.



1 Press POWER.



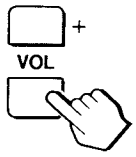
2 Press the FM button on the Remote Commander or TV/VIDEO/FM button on the TV so that the FM lamp lights.

3 Tune in the desired station with the FM TUNING control. The TUNING lamp lights while the FM station is tuned in.

4 Adjust the antenna.
Adjust the length, direction and angle until the sound is clearest.

5 Press the VOL + or – to adjust the volume.

For higher volume, press "+".
For lower volume, press "–".



From volume min. position to max. position, it takes 9 seconds by pressing VOL + button continuously.

To turn off the radio
Press POWER on the TV or on the Remote Commander.

When the power is turned on, the SLEEP lamp lights for about 17 seconds in the TV mode or for about 3 seconds in the FM mode.

Adjusting the Picture on the Remote Commander — in the TV Mode Only

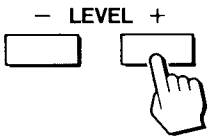
How to adjust

1 Press SELECT button repeatedly until the on-screen display of the item to be adjusted appears.

The item changes as follows:

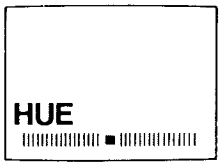
HUE → COLOR → BRIGHT → SHARPNESS

2 Press LEVEL +/– buttons.



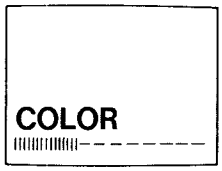
HUE

+: to make skin tones greenish
–: to make skin tones purplish



COLOR

+: to increase color intensity
–: to decrease color intensity



BRIGHT

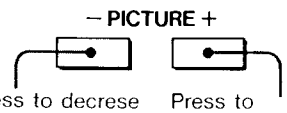
+: to make the picture brighter
–: to make the picture darker

SHARPNESS

+: to make the picture sharper
–: to make the picture softer

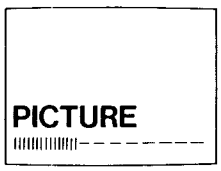
To clear the adjustment levels and restore the factory set levels, press **RESET.**

To adjust the picture contrast



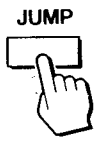
Press to decrese picture contrast with soft color

Press to increase picture contrast with vivid color



Switching Quickly Between Two Channels in the TV Mode Only

Press JUMP.

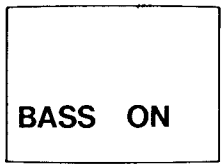


Each time JUMP is pressed, the channel which appeared on the screen directly before is recalled. This button enable you to keep track of two programms alternately.

Enjoying Convenient Features — in the Both TV and FM Radio Modes

To listen to the MEGA BASS sound

Press BASS ON/OFF button on the TV. You can enjoy the sound with MEGA BASS system which provides theater-like audio and concert hall intensity.



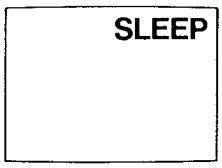
When watching TV or VIDEO, the indication BASS ON/OFF appears on the screen.

Muting the sound

Press MUTE. The "MUTING" indication will appear on the screen. To restore the sound, press MUTING again or VOL +.

To have the unit turn off automatically after one hour,

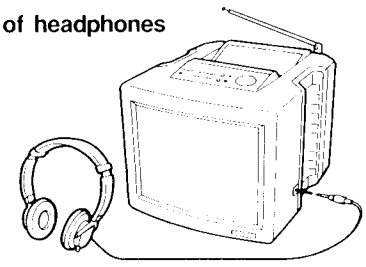
Press SLEEP. The "SLEEP" indication will appear on the screen for a few seconds and the SLEEP lamp on the TV will remain lit until the TV is turned off.



To cancel the SLEEP timer, press SLEEP again so that the SLEEP indicator goes out, or turn off the TV.

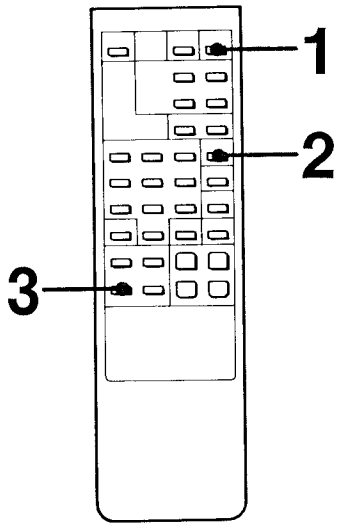
To listen with a pair of headphones

Connect the optional headphones to ∩ HEADPHONES jack. The sound is monaural.



Presetting TV Channels

To Preset All Receivable Channels Automatically



1 Press POWER.

POWER

2 Press TV/VIDEO on the Remote Commander or TV/VIDEO/FM on the TV so that the TV mode appears.

TV/VIDEO

TV/VIDEO/FM

3 Press AUTO PGM on the Remote Commander.

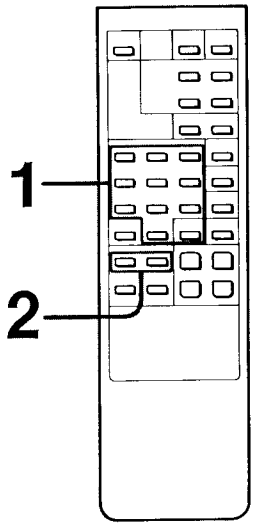
AUTO PGM

"AUTO PROGRAM" is displayed on the screen and receivable channels (other than the channels already preset) will be preset in numerical sequence. The channels previously preset remain in the units memory. When no more channels can be found, the programming stops and the lowest numbered channel is displayed.

Receivable channels on this TV are:
VHF: 2–13
UHF: 14–69
Cable: 1–125

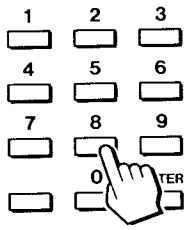
To check preset channels
Press CH +/–.

To Preset Only the Desired Channel or to Erase Unnecessary Channels



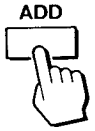
To add the channels that could not be preset with automatic programming because their signal strength was too weak, or to erase unnecessary channels, follow the steps below.

1 Press the channel number button(s) and then the ENTER to select the channel to be added or erased.



2 **To add channels — Press ADD.**

ADD



A "+" appears for a moment.
This channel has now been added to the channel scan memory.

To erase channels — Press ERASE.

ERASE

A "–" appears for a moment.
This channel has been erased from the channel scan memory.
The next time the CH +/– button is pressed, this channel will be skipped.

To add or erase more than two channels
Repeat steps 1 and 2 for other channels to added or erased.

Cable TV channel chart*
Cable TV systems use letters or numbers to designate channels. To resume in a channel, refer to the chart below.

Number on this TV	1	5	6	14	15	16	17
Corresponding CATV channel	A–8	A–7	A–6	A	B	C	D

18	19	20	21	22	23	24	25	26	27	28	29	30
E	F	G	H	I	J	K	L	M	N	O	P	Q

31	32	33	34	35	36	37	38	39	.....	93	94
R	S	T	U	V	W	W+1	W+2	W+3	.....	W+57	W+58

95	96	97	98	99	100	101	102	.....	123	124	125
A–5	A–4	A–3	A–2	A–1	W+59	W+60	W+61	.....	W+82	W+83	W+84

Check with your local cable TV company for more complete information on the available channels.

*The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Pay cable TV systems use scrambled or encoded signals and require special converters (decorders) in addition to the normal cable connection.

Specifications

Television system	American TV standards
Channel coverage	VHF: 2–13 UHF: 14–69 CATV: 1–125 FM: 88–108 MHz
Picture tube	Trinitron tube 10-inch picture measured diagonally 11-inch picture tube measured diagonally 90 degree deflection angle.
Antenna terminal	Combined VHF/UHF/FM 75 ohms
Input	VIDEO: phono jack 1Vp-p, 75 ohms AUDIO: phono jack 500 mVrms (100% modulation), 47 kohms.
Output	Headphones jack (minijack)
Power requirement	120 V AC, 60 Hz
Power consumption	55W
Dimensions	281 × 254 × 320 mm ($11\frac{1}{8}$ × 10 × $12\frac{5}{8}$ inches) (W/H/D)
Weight	8.5 kg
Supplied accessories	Remote commander RM-768 with 2 size AA batteries (1) Telescopic antenna (1)

Design and specifications are subject to change without notice.

Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed below. If the problem still cannot be solved, contact your nearest service facility.

Symptom	Check and adjust
Poor or no picture (screen not lit), no sound	• Is POWER switched on? • Check the TV/VIDEO/FM setting. • Check antenna connections.
Poor or no picture	• Adjust PICTURE or BRIGHT. • Adjust the antenna.
Good picture, no sound	• Press VOLUME + on the TV or VOL + on the Remote Commander. • Press MUTE on the Remote Commander. • Check that the TV/VIDEO/FM setting. • Isn't a pair of headphones plugged in?
No color	• Is it a color program?
Snow and noise only	• Adjust the antenna.
Dotted lines or stripes	• Often caused by interference from neon signs, dryers, etc. Move the unit to another spot.
Double images or ghosts	• Adjust the antenna. An external antenna may improve the picture.

Sony Corporation Printed in Japan